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Testicular Torsion

What is Testicular Torsion?

Testicular Torsion is when tissues around the testicle (also known as the "testis") are not attached well. This can cause the testes to twist around the spermatic cord. When this happens, it cuts off the blood flow to the testicle. It can cause pain and swelling, and should be treated as an emergency.

What Happens Normally?

The testicles (or "testes") are two organs that hang in a pouch of skin. The pouch is called the scrotum. It sits below the penis. This is where sperm and the male sex hormone (testosterone) are made. The blood supply for each testicle comes from the spermatic cord. This cord starts in the abdomen and extends into the scrotum. This cord also contains the vas deferens, which carries sperm from the testicles to the urethra.

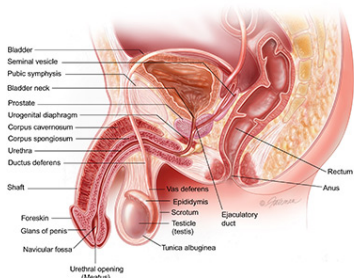


Diagram of the Male Reproductive Organs

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Symptoms

The most common sign of testicular torsion is sudden, severe pain on one side of the scrotum.

The testes should be about the same size. If one side quickly becomes larger than the other, this can be a problem. Change in scrotum color, especially redness or darkening, is also a problem. Early on, there may not be swelling. But very shortly after, the scrotal skin will swell and turn red. You may also feel nauseous and vomit.

Testicular torsion is a medical emergency. Since all blood for the testicle comes through the spermatic cord, the blood supply is cut off with a twist. The testicle will shrink ("atrophy") if the blood supply isn't restored within six hours. With no blood, the testicle could die (or "infarct"). When the testes die, the scrotum will be very tender, red, and swollen. Often the patient won't be able to get comfortable.

Any pain or discomfort in the testes is a sign to get medical help right away. Call your doctor even with no swelling or change in skin color.

Slow-onset pain in the testicle, over many hours or days, can be a sign of torsion. This is less common. Problems with passing urine, such as burning or having to go often are not normal signs of torsion. Torsion tends to happen on the left side more than the right. Most often, torsion is only on one side. Only 2 in 100 men with torsion have it in both testes with most of those cases happening in newborn babies.

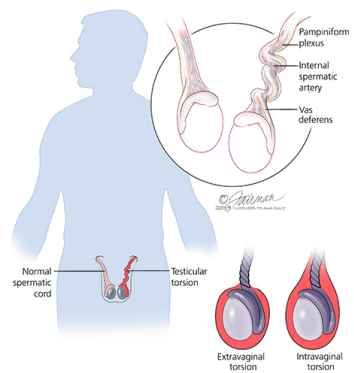


Diagram of Testicular Torsion

[Enlarge](#)

Causes

Torsion is not a common problem. It happens in about 1 in 4,000 males under the age of 25. It can also happen in newborns and in older men.

In most males, a testicle can't twist because the tissue around it is well attached. Some males are born with no tissue holding the testes to the scrotum. This lets the testes "swing" inside the scrotum (often called a "bell clapper" deformity).

Torsion can happen on either side, but rarely on both sides. Physical activity doesn't cause torsion. It may happen during exercise, sitting, standing or even sleeping.

Diagnosis

Testicular torsion is often found with a physical exam by a doctor. Ultrasound is often used to check blood flow to the testes and confirm the diagnosis. Reasons for pain in the testicle can include infection of the testicle or epididymis. For this reason urine testing to look for infection might be performed.

Torsion must be treated quickly. Your urologist may do surgery if torsion is happening.

Treatment

The spermatic cord needs to be untwisted (de-torsion) to restore the blood supply. Lasting damage starts after six hours of torsion. One study found that nearly 3 in 4 patients need the testicle removed ("orchidectomy") if surgery is delayed past 12 hours.

Ideally you can see a urologist for treatment. All patients with torsion will need surgery. It is possible to untwist the cord in the emergency room, but surgery is still needed. At surgery, the urologist will untwist the testicle and sew stitches to prevent future torsion. Most often, this is done through the scrotum. Sometimes it is done through the groin.

If the testicle cannot be saved, the urologist will remove the testicle and sew stitches around the other testicle to prevent future torsion. This can only be determined at the time of surgery.

The testes of **newborns with torsion** can rarely be saved. The testes are almost always infarcted (dead). Emergency surgery is not the same with infants. With infants, there have been cases of the second side twisting shortly after birth. This would leave the baby with no testes. With better anesthesia and post-op care, many pediatric urologists will operate within the first few hours or days of life. The infarcted testicle would be removed, and stitches would be used to prevent torsion in the second testis.

After Treatment

Whether the testicle is removed or not, surgery in the scrotum will take time to heal. You may need to take pain medicine for a few days. Within a few days to a week, you should be able to return to work or school. It's helpful to avoid strenuous activity or exercise for many weeks.

You shouldn't notice the stitches around the testicles, and they shouldn't bother you. The stitches are there to keep torsion from happening again. Torsion of the other testicle can't be prevented by changes in activity or by taking medicine. Only sewing stitches around the testicle will prevent future torsion. If you feel pain or swelling, seek medical attention right away.

If the twisted testicle is left in place, it still might shrink a bit, since lasting damage may happen. Sometimes, if one testicle is removed, the other may grow larger than normal. This is known as "compensatory hypertrophy."

More Information

How will my fertility be affected after losing a testicle?

Only one working testicle is needed for normal fertility and male features. A single testicle can make normal amounts of sperm and testosterone. But studies show that up to one third of patients have a lower sperm count after a torsion. Testicular torsion can also result in anti-sperm antibodies, which may change how the sperm work and move. Some studies suggest that these men could have lower fertility, but this is rare.

How will losing a testicle or having a weakened testicle affect my lifestyle?

If you've lost a testicle or have a weakened testicle, you should be careful with the one that's left. Always wear protection when playing contact sports. Seek medical care if you have any discomfort or notice anything abnormal in the scrotum or remaining testicle. You may also have a decrease in the amount of testosterone in your blood at an early age. It's a good idea to have your testosterone levels checked regularly as you get older.

Should I consider a testicular prosthesis?

A testicular prosthesis is used to restore the look and feel of a testicle that has been removed. One type is made of silicone and filled with salt water. Most often, the prosthesis is placed when a man is fully grown and through puberty. If a smaller prosthesis is used in a young boy, an adult size would be needed later. This means more surgery. Surgery for a prosthetic testicle is often done months after the testicle is removed. The decision for a prosthesis is personal, and should be discussed with your urologist.

Can a newborn have testicular torsion?

Yes, though this is very rare. Its exact cause is unknown. It may occur before birth and may be associated with difficult labor or higher birth weight. The spermatic cord twist is also different in infants. **Testicular torsion in newborns** most often appears as a hard scrotal mass, with some darkening of the skin. Unlike older patients, infants are not upset with pain. Unfortunately, most of these testes cannot be saved.

What other torsions can occur?

Torsion of the "appendix of the epididymis" or "appendix of the testicle" can occur. In this kind of torsion, twists are found in a small, upper part of the epididymis or testicle, causing infarction (death of that tissue). These parts of the testicle are from the embryo stage and have no use in men. This kind of torsion is more common in prepubescent boys than testicular torsion. It is rare in older boys or men.

Updated March 2024.

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